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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,098	02/04/2002	Moran Amidan	U 013862-5	4304
140	7590	09/11/2006	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			HOANG, THAI D	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/067,098

Applicant(s)

AMIDAN ET AL.

Examiner

Thai D. Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 06/13/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-11, 14, 22-25, 28-32, 35-38, 41 and 48-51 is/are rejected.
- 7) ☒ Claim(s) 6-7, 12-13, 15-21, 26-27, 33-34, 39-40, 42-47, 52-53 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/26/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 8-9, 11, 23, 28-29, 35-36, 38 and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by Blair, US PAT No. 6,778,495 B1, hereafter referred to as Blair.

Regarding claims 1-2, 11, 23, 28-29, 38 and 49, Blair discloses a method and system called "Combining multilink and IP per-destination load balancing over a multilink bundle." Blair teaches that the system comprising:

the device 11 breaks the packet 31 into a series of fragments, shown for example as the three fragments 331, 332, 333. The fragments may have the same size if the links have similar bandwidths or bit-rates; or the fragments may be sized to correspond to differences in the capacities of the links, fig. 2, col. 6, lines 23-28;

The fragments 331-333 are queued-up for transmission over the links 214-212 respectively, fig. 2, col. 6, lines 56-60; and

The receiving device 13 (fig. 4) includes multiple interfaces 61. Each interface 61 receives a series of packets and fragments from the transmitter interface and the

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fragments recovered by a reassembly operation 71, to reconstruct the original packet from the fragments.

Regarding claims 8 and 35, Blair teaches the links 21 may be logical channels carried over the same the same physical link; col. 6, lines 2-4.

Regarding claims 9 and 36, Blair teaches that each fragment is transmitted on one of the link or channel 21 in bundle 19, fig. 2, col. 5, lines 61-63, col. 6, lines 49-60.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5, 24-25, 30-32 and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blair, US Patent No. 6,778,495 B1 as shown above, in view of Olkin, US PAT No. 6,310,892 B1, hereafter referred to as Blair and Olkin respectively.

Regarding claims 3 and 30, Blair teaches the packet is divided into a plurality of fragments (fig. 2). The fragments may be sized to correspond to differences in the capacities of the links, fig. 2, col. 6, lines 23-28. Blair does not teach each of the fragments includes a size indicator. However, Olkin, discloses each segment comprises a segment length indicator, fig. 4, col. 5, lines 30-33. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the length indicator disclosed by Olkin into Blair's system in order to easily control fragments transmission in the system.

Regarding claims 4, 24, 31 and 50, Blair teaches the system fragments a data packet into a plurality of fragments, see fig. 2.

Regarding claims 5, 25, 32 and 51, Blair teaches the data packet is fragmented into a plurality of fragments in accordance with multilink point-to-point protocol prior to mapping the fragments to the links, fig. 3, steps 45-51, col. 6, lines 25-28; and the fragments are reassembled to data packet, fig. 4.

Claims 22 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blair, US Patent No. 6,778,495 B1 as shown above, in view of May, USPAT No. 5,835,536, hereafter referred to as Blair and May respectively.

Regarding claims 22 and 48, Blair does not disclose data fragments are transmitted over DSL connection. However, May discloses the apparatus adapts with DSL; col. 1, lines 22, 30-31, 42. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the DSL connection disclosed by May into Blair's system in order to adapt with DSL conventional system used in Networks.

Claims 10, 14, 37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blair as shown above in view of Gross et al, US Patent No. 6,266,348, hereafter referred to as Blair and Gross respectively.

Regarding claims 10 and 37, as best understood, Blair does not teach in response to a change the status of channels, the system changes the partitioning among the channels. However, Gross discloses a modem responds to a condition of the channels in the system to change the status of subchannels in of the modem, col. 2,

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lines 7-14, col. 4, lines 28-38, col. 7, lines 37-50. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt Gross' method into the apparatus disclosed by Blair in order to optimize the bandwidth of the system because the bandwidth status in the system is always updated.

Regarding claims 14 and 41, Blair does not disclose a table for mapping data symbols. However, Gross teaches this feature, col. 7, line 11- -col. 8, line 14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt Gross' method into the apparatus disclosed by Blair for advantage cited above with respect to claim 10.

#### ***Allowable Subject Matter***

Claims 6-7, 12-13, 15-21, 26-27, 33-34, 39-40, 42-47 and 52-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-53 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

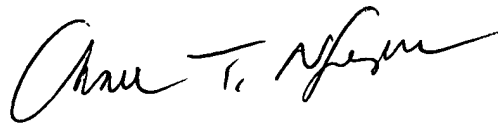
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D. Hoang whose telephone number is (571) 272-3184. The examiner can normally be reached on Monday-Friday 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Hoang



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600